



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,445	12/17/2003	Charles H. Bishop	584-29861US (102.69)	8091

7590 08/16/2006

SIMMONS & DERRINGTON
Frost Bank Building
6750 West Loop South, Suite 920
Bellaire, TX 77401

EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
----------	--------------

3672

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/738,445	BISHOP, CHARLES H.	
	Examiner	Art Unit	
	Giovanna M. Collins	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 43 and 27. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-9, 11-13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Garrett 4,019,580.

Garrett discloses (fig. 1-8) a rotating tool comprising a body (32), a compression assembly (at 192), a hydraulic assembly (at 58), and a lead screw said compression assembly comprising a selectively compressible compression element (188) said hydraulic assembly comprising a reservoir (58) having an open end and a closed end, said reservoir fillable with fluid and formed to receive a piston (60) within said open end; and said piston being threadingly coupled with said lead screw and slidingly coupled with said body such that movement of said piston towards said closed end causes rotation of said piston that correspondingly produces rotation of said body and selectively allowing expansion of the compression element causes movement of the piston (col. 10, lines 32-35).

Referring to claim 2, Garrett discloses potential energy is capable of being stored within said compression element (188).

Referring to claim 3, Garrett discloses the fluid is disposed within said reservoir (at 58) between said piston (60) and said closed end.

Referring to claims 4, Garrett discloses said hydraulic assembly (at 58) is coaxial with said compression assembly (at 192) and is capable of selectively providing a reactive force to maintain said compression element in a compressed state.

Referring to claim 5, Garrett discloses relieving the fluid from said reservoir (58) removes said reactive force and enables movement of said piston towards said closed end.

Referring to claim 6, Garrett discloses said compressive assembly (at 192) further comprises a rotor (at 42) provided on the end of the compressive element distal

Art Unit: 3672

from the hydraulic assembly, and a thrust cup (see Fig. 1a above element 192).

provided on the end of the compressive element proximate to the hydraulic assembly.

Referring to claim 7, Garrett discloses comprising a collar (76a) coaxially connecting said hydraulic assembly to said compressive assembly.

Referring to claim 8, Garrett discloses wherein said compressive element (188) is a helical spring.

Referring to claim 9, Garrett discloses an orifice (at 186) formed on said hydraulic assembly providing fluid communication between said reservoir and the outside of said hydraulic assembly.

Referring to claim 11, Garret discloses (see Fig. 7a) an anchoring device (210) capable of anchoring said rotating tool within a wellbore and stabilizing said lead screw during rotation of said body.

Referring to claim 12, Garrett discloses said reservoir (at 58) is comprised of an elongated annulus and said piston comprises an elongated tube formed for insertion into said elongated annulus.

Referring to claim 13, Garrett discloses said body comprises a sleeve (32) that encompasses a portion of said rotating tool.

Referring to claim 15, Garrett discloses a downhole tool (42,44) operatively connection to the rotating tool such that rotation of the rotating tool causing rotation of the downhole tool.

Referring to claim 16, Garrett discloses a method of using the rotating tool of claim 1 comprising: compressing said compression element (188); sealing the fluid

Art Unit: 3672

within said reservoir (58) thereby providing a reactive force to maintain said compression element in a compressed state; and removing said reactive force from said compression element thereby allowing said piston (60) to be urged along the length of said lead screw towards said closed end of said reservoir by the decompression of said compression element, whereby the threaded coupling of said piston with said lead screw produces rotation of said piston that in turn produces rotation of said body.

Referring to claim 18, Garrett discloses disposing said rotating tool (30) within a wellbore.

Referring to claim 19, Garrett discloses comprising anchoring (at 210,220) said lead screw within the wellbore.

Referring to claim 22, Garrett discloses attaching a downhole tool (42,44) to said rotating tool.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5,8-10,12, 13,15-18,22 -24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tedder 4,772,849.

Tedder discloses (fig. 1-8) a rotating tool comprising a body (10), a compression assembly (40), a hydraulic assembly (14), said compression assembly comprising a

Art Unit: 3672

selectively compressible compression element (60), said hydraulic assembly comprising a reservoir (14) having an open end and a closed end, said reservoir fillable with fluid and formed to receive a piston (32) within said open end; slidingly coupled with said body such that movement of said piston towards said closed end causes rotation of said piston that correspondingly produces rotation of said body and selectively allowing expansion of the compression element causes movement of the piston (col. 2, lines 52-55). Tedder does not disclose a lead screw and the piston threadedly connected.

However, Tedder does disclose the connection is equivalent to a lead screw connection (col. 4, lines 1-4). Inasmuch as the references disclose these elements as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982). Therefore it would be obvious to one of ordinary skill in the substitute the connection means disclosed by Tedder to be a lead screw connection means.

Referring to claim 2, Tedder discloses potential energy is capable of being stored within said compression element (60).

Referring to claim 3, Tedder discloses the fluid is disposed within said reservoir 14) between said piston (32) and said closed end.

Referring to claims 4, Tedder discloses said hydraulic assembly (at 14) is coaxial with said compression assembly (at 60) and is capable of selectively providing a reactive force to maintain said compression element in a compressed state.

Referring to claim 5, Tedder discloses relieving the fluid from said reservoir (14) removes said reactive force and enables movement of said piston towards said closed end.

Referring to claim 8, Tedder wherein said compressive element (60) is a helical spring.

Referring to claim 9, Tedder discloses an orifice (at 68) formed on said hydraulic assembly providing fluid communication between said reservoir and the outside of said hydraulic assembly.

Referring to claim 10, Tedder discloses a valve (v) selectively provided fluid through said orifice.

Referring to claim 12, Tedder discloses said reservoir (at 14) is comprised of an elongated annulus and said piston comprises an elongated tube formed for insertion into said elongated annulus.

Referring to claim 13, Tedder discloses said body comprises a sleeve (12) that encompasses a portion of said rotating tool.

Referring to claim 15, Tedder discloses a downhole tool (50) operatively connection to the rotating tool such that rotation of the rotating tool causing rotation of the downhole tool.

Referring to claim 16, Tedder, as modified, discloses a method of using the rotating tool of claim 1 comprising: compressing said compression element (60); sealing the fluid within said reservoir (15) thereby providing a reactive force to maintain said compression element in a compressed state; and removing said reactive force from said

Art Unit: 3672

compression element thereby allowing said piston (32) to be urged along the length of said lead screw towards said closed end of said reservoir by the decompression of said compression element, whereby the threaded coupling of said piston produces rotation of said piston that in turn produces rotation of said body.

Referring to claim 17, Tedder disclose removing the reactive force is accomplished by metering the fluid out of the reservoir (at the valve V.)

Referring to claim 18, Tedder does not disclose the tool is disposed within a wellbore. Tedder does disclose the tool is used to inspect the walls of tubings (see col. 1, lines 6-11). As it would be advantageous to use the tube to inspect the walls of a tubing install in a wellbore it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Tedder to disposed the rotating tool in a wellbore.

Referring to claim 22, Tedder discloses attaching a downhole tool (50) to said rotating tool.

Referring to claim 23, Tedder discloses azimuthally orienting the downhole tool by rotating the rotating tool a certain amount (col. 2, lines 55-58).

Referring to claim 24, Tedder discloses selective fluid flow through the orifice (at 68) enables fluid to evacuate the reservoir thereby enabling movement of piston (when spring returns piston to original position)

4. Claims 14 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tedder 4,772,849 in view of Hulsing et al. 4,343,654..

Referring to claims 14 and 20, Tedder, as modified, does not disclose a gyroscope. Hulsing teaching a gyroscope is well known in the art for measuring orientation. As it would be advantageous to verify the orientation of the tool in the well, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool and method disclosed by Tedder to have a gyroscope as taught by Hulsing.

Referring to claim 21, Tedder discloses calibrating the tool (col. 3, lines 55-60).

Response to Arguments

5. Applicant's arguments filed 11/10/05 have been fully considered but they are not persuasive.

The applicant states the Garret reference does not disclose the compression element expands to produce piston movement. The applicant is incorrect. In col. 10, lines 36-35, Garrett states the spring moves the piston to its original position. Since the spring was compressed at the start of the operation, it is the expansion of the spring that moves the piston back to its original position.

The applicant stats the Tedder reference does not disclose the compression element expands to produce piston movement. The applicant is incorrect. In col. 2, lines 50-53, Tedder states the spring moves the piston to its original position. Since the spring was compressed at the start of the operation, it is the expansion of the spring that moves the piston back to its original position.

Art Unit: 3672

In response to applicant's argument that the Tedder reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the claims are directed the problem of how to rotate tools and the Tedder reference discloses tool that rotates other tools.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

Art Unit: 3672

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gmc


David Bagnell
Supervisory Patent Examiner
Technology Center 3670